

PERMIT APPLICATION NUMBER: NRS#04.298

APPLICANT: Premcor Refining Group, Inc.
Office of the Vice President, Environmental Health and Safety
543 W. Mallory Avenue
Memphis, Tennessee 38109
(901) 775-5716

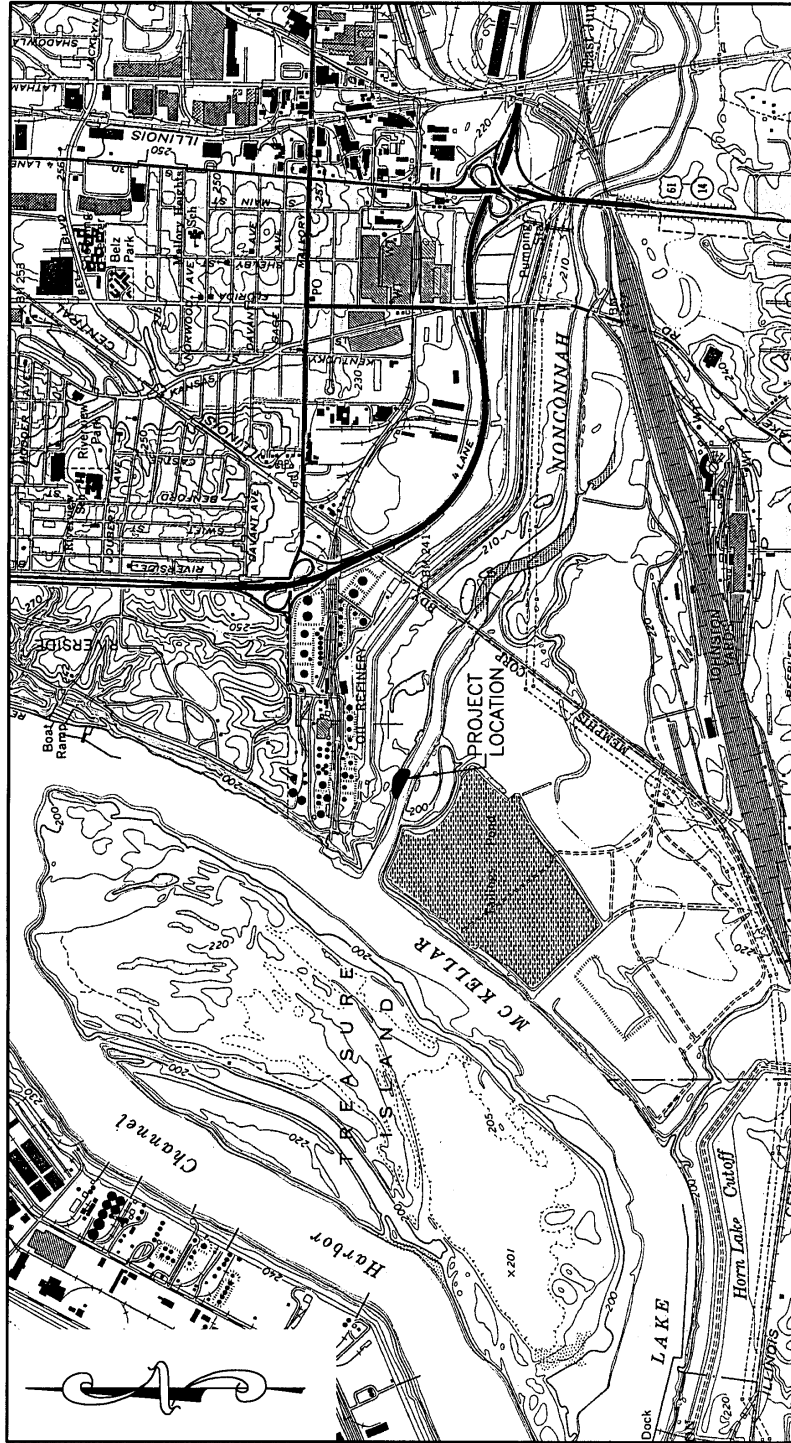
LOCATION: The proposed project is located on Nonconnah Creek approximately 1,000 feet to 1,500 feet from the mouth of the creek at McKellar Lake, Shelby County, Tennessee.

WATERSHED DESCRIPTION: Nonconnah Creek is located in the Nonconnah Creek Watershed (HUC TN08010211). Sixty-five percent of the watershed is in Tennessee with the remainder in Mississippi. Nonconnah Creek flows into McKellar Lake before entering the Mississippi River. The watershed is heavily urbanized. Nonconnah Creek is on the State of Tennessee's 303(d) list of water quality limited streams and lakes. Over half of the watershed has been assessed with only 12 percent fully supporting. Urban runoff, collection system failures and channelization impair the most stream miles. EPA has approved pathogens (Total Maximum Daily Loads) TMDLs on seven streams (118 miles) listed for pathogens. Nonconnah Creek has a fish tissue advisory from the mouth to Horn Lake Road Bridge for chlordane and other toxic organic substances. The topography is rolling uplands with moderately wide valley floors. The lower one-half mile has been filled on both banks to offer flood free sites for industry. This fill has channelized the stream and eliminated the flood plain resulting in higher velocity currents during heavy rains and especially at low Mississippi River stages. The highly erodible silt substrate requires stabilization to protect existing facilities located on nearby banks. The Corps of Engineers has undertaken major revetment projects in several areas in an attempt to control erosion along the lower section of the stream. Streamside vegetation is grasses, wild meadow plants and small trees below top of bank.

DESCRIPTION: The proposed project is restoration and stabilization of approximately 425 feet of stream bank (at toe). The average width (at stabilization area) is 206 feet at toe and 476 feet at top of bank. The average width at toe after stabilization will be 178 feet (a decrease of approximately 28 feet). The average width at the top of bank after stabilization will be 468 feet (a decrease of approximately 8 feet). The north bank will be Rip Rapped. There will be no change on the south bank. No dredging will be performed. There will be minimal clearing and no grading of approximately 44,500 square feet on slope below rip rap. No excavation or fill will be performed except minor trenches to toe-in rip rap at west end and at toe. No erosion and sedimentation control structures are anticipated to be required.

PERMIT COORDINATOR: Dorsey Horne, STATE OF TENNESSEE, Department of Environment and Conservation, Division of Water Pollution Control, 7th Floor, L & C Annex, 401 Church Street, Nashville, Tennessee 37243-1534

USGS QUAD: SOUTHWEST MEMPHIS 404-SE, TENNESSEE-ARKANSAS



PURPOSE: RESTORE BANK EROSION TO
FORMER POSITION AND STABILIZE
DATUM: NGVD 29

PREMCO REFINING GROUP
543 W. MALLORY AVENUE
MEMPHIS, TN 38019

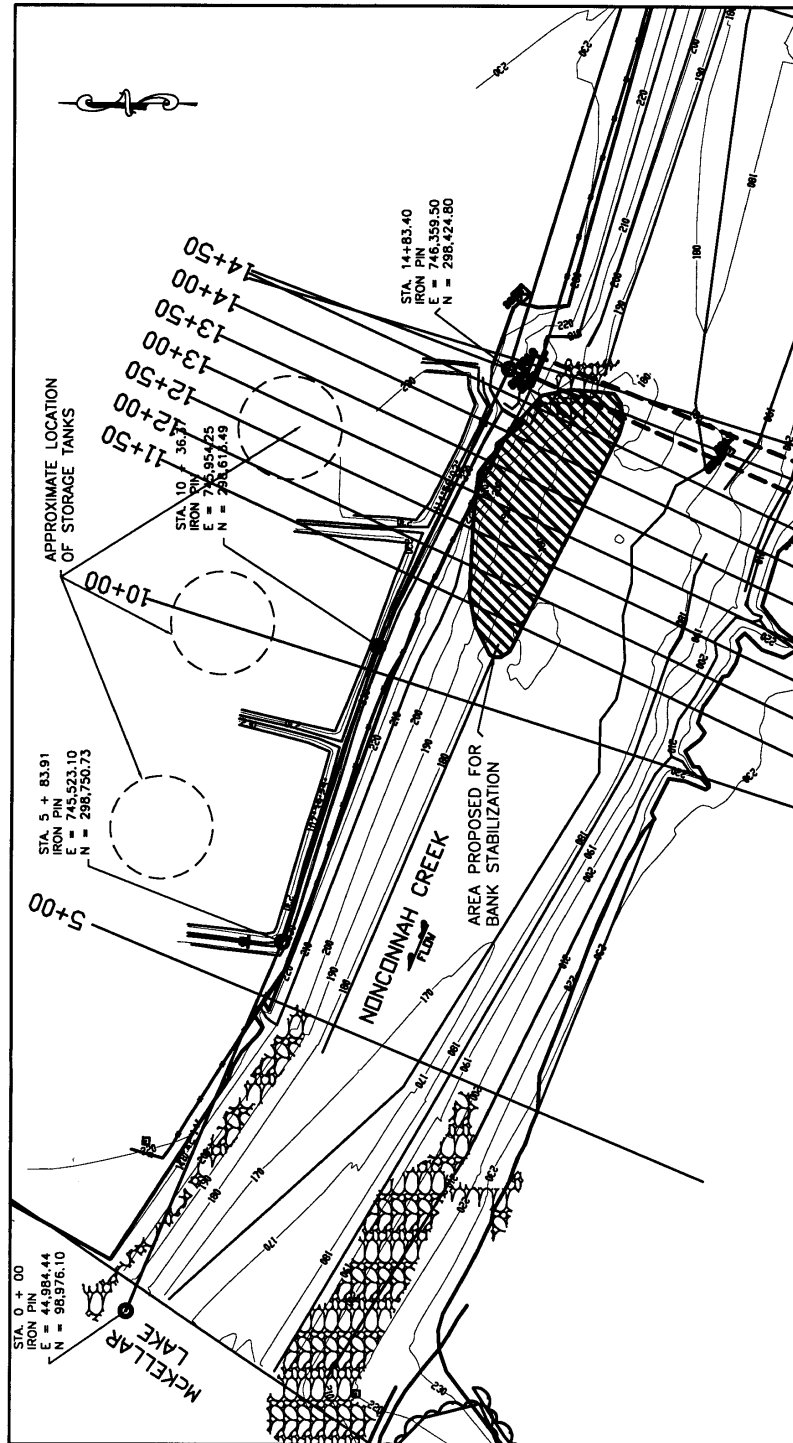
VICINITY MAP

SOUTHWEST MEMPHIS, TN-AR QUADRANGLE
1965, PHOTOREVISED 1973
SCALE 1:24,000

PROPOSED BANK RESTORATION AND STABILIZATION

IN: NONCONNAH CREEK
AT: 1000-1500 FEET FROM MCKELLAR LAKE
COUNTY OF: SHELBY STATE: TN
APPLICATION BY: PREMCO REFINING GROUP

SHEET: 1 OF 2 DATE: 4-30-2004



PURPOSE: RESTORE BANK EROSION TO FORMER POSITION AND STABILIZE DATUM: NGVD 29	<p>PLAN VIEW</p> <p>GRAPHIC SCALE</p>	<p>PROPOSED BANK RESTORATION AND STABILIZATION</p> <p>IN: NONCONNAH CREEK</p> <p>AI: 1000-1500 FEET FROM MCKELLAR LAKE</p> <p>COUNTY OF: SHELBY STATE: TN</p> <p>APPLICATION BY: PREMCOR REFINING GROUP</p> <p>SHEET: 2 OF 2 DATE: 4-30-2004</p>
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